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10/599,664	10/04/2006	John Warwick Ellemor	5888	2472
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EXAMINER				
CHAPEL, DEREK S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/599,664

Applicant(s)

ELLEMOR, JOHN WARWICK

Examiner

DEREK S. CHAPEL

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-43 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 19 and 26-43 is/are rejected.
7) ☒ Claim(s) 20-25 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 04 October 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/S608)
Paper No(s)/Mail Date 10/4/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☒ Other: Drawings Amendments

DETAILED ACTION

Status Of Claims

1. This Office Action is in response to an amendment received 10/4/2006 in which Applicant lists claims 1-18 as being cancelled and claims 19-43 as being new. It is interpreted by the examiner that claims 19-43 are pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The Information Disclosure Statement(s) (IDS) filed on 10/4/2006 was considered.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 37 in figure 7 and element 43 in figure 8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" has been used to designate both exiting beams and Bollard light fixture (paragraphs 53 and 54). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 34 and 35 must be clearly shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
8. The disclosure is objected to because of at least the following informalities (the following are not intended to be a complete listing of informalities and the entire specification should be checked for errors):
 - a. In original paragraph [0014] of the specification, "?ee-crate" needs to be fixed;
 - b. At least original paragraphs [0021], [0035] and [0036] of the specification are improper run-on sentences, some containing randomly capitalized words;
 - c. In original paragraph [0022], "Mirror," should be changed to --mirror.--;

- d. In paragraph [0026], "a thin layer of transparent" does not make sense;
- e. The specification contains a brief description of figure 11, which the applicant intends to delete;
- f. In paragraph [0050], "cap 18" should be changed to --cap 8-- and ;
- g. In paragraph [0053], "fulfil" should be changed to --fulfill--;
- h. In paragraph [0055], "devise 37" should be changed to --device 37--;
- i. Additionally, at least paragraphs [0056]-[0058] should be checked for informalities.

Appropriate correction is required.

Claim Objections

- 9. Claims 19, 26, 27, 30, 31, and 33 recite the limitations "said light absorbing surface", and/or "said light reflecting mirror surface", and/or "said element". There is insufficient antecedent basis for this limitation in the claim. For the purpose of this examination, "said light absorbing surface", "said light reflecting mirror surface", and "said element" have been interpreted as --said at least one light absorbing surface--, --said at least one light reflecting mirror surface--, and --said at least one thin element-- respectively. Claims 27-43 are objected to for inheriting the same informalities through their dependency from claim 26.
- 10. Claims 20-25 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim in that claim 1 has been cancelled and claims 20-25 either directly or indirectly depend from claim 1.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Therefore, claims 20-25 have not been further treated on the merits.

11. Claim 43 is objected to because of the following informalities: "frustonconical" and "frustoconcial" should be changed to --frustoconical--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 19, 26, 30 and 36, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Ross, U.S. Patent Number 1,409,413 (hereafter Ross).

14. As to claims 19 and 26, Ross discloses a method/apparatus for a light shielding article having at least one thin element (see at least figure 1, element 16) defining at least one light absorbing surface (see at least lines 82-112 of page 1 and lines 1-19 of page 2) and at least one light reflecting mirror surface (see at least lines 82-112 of page 1 and lines 1-19 of page 2), said at least one light absorbing surface being spaced from and facing said at least one light reflecting mirror surface (see at least figures 1 and 2), and a transparent material between said surfaces (see at least figures 1 and 2, the air between elements 16), said transparent material being in contact with the respective

said surfaces and defining between said surfaces, a passageway for the passage of light (see at least figures 1 and 2, the air between elements 16).

15. As to claim 30, Ross discloses that said at least one thin element comprises a spiral strip element having a light absorbing surface and a light reflective mirror surface on opposite sides thereof (see at least figure 1, element 16 as well as lines 82-112 of page 1 and lines 1-19 of page 2).

16. As to claim 36, Ross discloses a light shield article (see at least figure 1, element 16) for controlling the passage of light from an artificial light source (see at least figure 1, element 19), said shielding article being adapted to be positioned between said light source and an observer (see at least figure 1), said article including said at least one said element defining said light absorbent surface and light reflecting mirror surface (see at least figure 1, element 16 as well as lines 82-112 of page 1 and lines 1-19 of page 2), said light absorbent surface being positioned in use relative to said light reflecting mirror surface and to said light source and said observer such as to prevent observation of said light source in the normal field of view of said observer and to permit said observer to observe directly said light absorbent surface or a reflection through said light reflecting mirror surface of said light absorbent surface (see at least figure 1, element 16 as well as lines 82-112 of page 1 and lines 1-19 of page 2).

17. Claims 19, 26-29 and 33-35, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Whitmore, U.S. Patent Number 1,639,474 (hereafter Whitmore).

18. As to claims 19 and 26, Whitmore discloses a method/apparatus for a light shielding article having at least one thin element (see at least figures 1-5, element 17) defining at least one light absorbing surface (see at least figure 3, element 41) and at least one light reflecting mirror surface (see at least figure 3, element 40), said at least one light absorbing surface being spaced from and facing said at least one light reflecting mirror surface (see at least figures 1 and 2), and a transparent material between said surfaces (see at least figures 1 and 2, the air between elements 17), said transparent material being in contact with the respective said surfaces and defining between said surfaces, a passageway for the passage of light (see at least figures 1 and 2, the air between elements 17).

19. As to claim 27, Whitmore discloses that said at least one thin element comprises at least one pair of spaced apart elements (see at least figures 1 and 2, elements 17), one said element of said pair having said at least one light absorbing surface (see at least figure 2, element 41) and the other said element of said pair having said at least one light reflective mirror surface (see at least figure 2, element 40).

20. As to claim 28, Whitmore discloses that said at least one thin element comprises a plurality of spaced apart said elements having said transparent material between respective said elements to define a plurality of juxtaposed said passageways (see at least figures 1 and 2, the air between elements 17).

21. As to claim 29, Whitmore discloses that said pair of elements comprise thin planar elements having a pair of opposite planar surfaces (see at least figures 1 and 2, elements 17).

22. As to claim 33, Whitmore discloses a light shielding article, said light shielding article being adapted for observing a scene or subject matter therethrough externally of said article and within the normal field of view of an observer (see at least figures 1 and 2; it is noted that the scene (outside the window), can be observed within the normal field of view of the observer when the slats are positioned horizontally), said shielding article comprising a panel adapted to be supported in a substantially vertical attitude (see at least figure 1, element 1) and having a first section comprising a plurality of substantially parallel substantially planar said thin elements (see at least figures 1 and 2, elements 17) and transparent material between respective pairs of said thin elements to define a series of juxtaposed passageways through said shielding article which allowing the transmission of light therethrough (see at least figures 1 and 2, the air between elements 17), each said element having an upper and lower surfaces comprising said light reflective and light absorbent surface respectively (see at least figure 3, elements 40 and 41), said light reflecting surfaces being adapted to reflect external light away from said observer (see at least lines 15-18 on page 1).

23. As to claim 34, Whitmore discloses that the panel includes a second section below said first section (see at least figure 2, elements 17 and the window that the blind is in front of; it is noted that at least some of elements 17 and part of the window are below part of element 1), said second section comprising a transparent material permitting observation of said scene or subject matter through said panel (see at least the window that the blind is in front of).

24. As to claim 35, Whitmore discloses that the second section further comprise a plurality of thin planar substantially parallel elements, said elements having opposite surfaces of a light absorbent material (see at least figures 2 and 3, elements 41).

25. Claims 19, 26-29 and 31, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Rykowski et al., U.S. Patent Number 6,095,668 (hereafter Rykowski).

26. As to claims 19 and 26, Rykowski discloses a method/apparatus for a light shielding article having at least one thin element (see at least figures 1 and 17-19, elements 100 and 1100) defining at least one light absorbing surface (see at least figure 17, element 1104) and at least one light reflecting mirror surface (see at least figure 17, element 1102), said at least one light absorbing surface being spaced from and facing said at least one light reflecting mirror surface (see at least figures 17 and 18), and a transparent material between said surfaces (see at least figures 17 and 18, the air between elements 1100), said transparent material being in contact with the respective said surfaces and defining between said surfaces, a passageway for the passage of light (see at least figures 17 and 18, the air between elements 1100).

27. As to claim 27, Rykowski discloses that said at least one thin element comprises at least one pair of spaced apart elements (see at least figures 17 and 18, elements 1100), one said element of said pair having said at least one light absorbing surface (see at least figure 17, element 1104) and the other said element of said pair having said at least one light reflective mirror surface (see at least figure 17, element 1104).

28. As to claim 28, Rykowski discloses that said at least one thin element comprises a plurality of spaced apart said elements having said transparent material between respective said elements to define a plurality of juxtaposed said passageways (see at least figures 17 and 18, the air between elements 1100).

29. As to claim 29, Rykowski discloses that said pair of elements comprise thin planar elements having a pair of opposite planar surfaces (see at least figures 17 and 18, elements 1100).

30. As to claim 31, Rykowski discloses that said at least one light absorbent surface comprises a light absorbent black surface (see at least column 7, lines 16-25).

31. Claims 19, 26-29, 36 and 43, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Raimondi, U.S. Patent Number 5,570,239, of record (hereafter Raimondi).

32. As to claims 19 and 26, Raimondi discloses a method/apparatus for a light shielding article having at least one thin element (see at least figures 10 and 27-29, elements 14, 50 and 56) defining at least one light absorbing surface (see at least figure 10, element 20; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30) and at least one light reflecting mirror surface (see at least figure 10, element 12; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30), said at least one light absorbing surface being spaced from and facing said at least one light reflecting mirror surface (see at least figures 10 and 27-29), and a

transparent material between said surfaces (see at least figure 10, element 26; figure 27, element 44 and figures 28-29, the air between elements 58), said transparent material being in contact with the respective said surfaces and defining between said surfaces, a passageway for the passage of light (see at least figure 10, element 26; figure 27, element 44 and figures 28-29, the air between elements 58).

33. As to claim 27, Raimondi discloses that said at least one thin element comprises at least one pair of spaced apart elements (see at least figures 10 and 27-29, elements 14, 50 and 56), one said element of said pair having said at least one light absorbing surface (see at least figure 10, element 20; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30) and the other said element of said pair having said at least one light reflective mirror surface (see at least figure 10, element 12; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30).

34. As to claim 28, Raimondi discloses that said at least one thin element comprises a plurality of spaced apart said elements having said transparent material between respective said elements to define a plurality of juxtaposed said passageways (see at least figures 10 and 27-29, elements 14, 50, 56, 26, 44 and the air between elements 58).

35. As to claim 29, Raimondi discloses that said pair of elements comprise thin planar elements having a pair of opposite planar surfaces (see at least figures 10 and 27-29, elements 14, 50 and 56).

36. As to claim 36, Raimondi discloses a light shield article (see at least figures 10 and 27-29, elements 14, 50 and 56) for controlling the passage of light from an artificial light source (see at least column 6, line 38 through column 8, line 30), said shielding article being adapted to be positioned between said light source and an observer (see at least figures 10 and 27-29), said article including said at least one said element defining said light absorbent surface (see at least figure 10, element 20; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30) and light reflecting mirror surface (see at least figure 10, element 12; figure 27, element 45; figure 28, element 58; and figure 29, element 58 as well as column 6, line 38 through column 8, line 30), said light absorbent surface being positioned in use relative to said light reflecting mirror surface and to said light source and said observer such as to prevent observation of said light source in the normal field of view of said observer and to permit said observer to observe directly said light absorbent surface or a reflection through said light reflecting mirror surface of said light absorbent surface (see at least figures 10 and 27-29; it is noted that this occurs when the observer is a ways off to the side of the light shield article and not directly below it and the light source).

37. As to claim 43, Raimondi discloses that said elements comprise a plurality of frustoconical elements adapted to surround said artificial light source (see at least figures 28 and 29), each said frustoconical element having an upper and lower surface, said upper surface comprising said light absorbent surface and said lower surface comprising said light reflective mirror surface (see at least figures 28 and 29, elements

58 as well as column 6, line 38 through column 8; whether a surface is the upper or lower surface depends on the orientation of the light source and therefore the elements).

Claim Rejections - 35 USC § 103

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

40. Claims 31-32 and 37, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Raimondi, U.S. Patent Number 5,570,239, of record (hereafter Raimondi) in view of Chiu et al., U.S. Patent Number 6,398,370 B1 (hereafter Chiu).

41. As to claims 31, 32 and 37, Raimondi does not specifically disclose that said light absorbent surface comprises a light absorbent black surface, or that the light absorbent black surface and transparent material have a common refractive index to prevent specular reflections between the junction thereof.

However, Chiu teaches a light control device having a plurality of light absorbing elements wherein the light absorbing materials comprise a black surface and the black surface and transparent material have a common refractive index to prevent specular reflections between the junction thereof (see at least column 6, lines 13-25 of Chiu).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the light shielding article of Raimondi to include the teachings of Chiu so that the light absorbent surface comprises a light absorbent black surface, and so that the light absorbent black surface and transparent material have a common refractive index, for the purpose of effectively absorbing incident light and to reduce reflections, as taught by Chiu (see at least column 6, lines 13-25 of Chiu).

42. Claims 38-42, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Raimondi, U.S. Patent Number 5,570,239, of record (hereafter Raimondi).

43. As to claims 38-42, Raimondi discloses that the light shielding article is adapted for use with a fluorescent lamp and includes a plurality of longitudinal elements.

Raimondi does not specifically disclose that the light shielding article includes a plurality of transverse elements intersecting the longitudinal elements, that the transverse elements extend relative to the longitudinal elements to form a plurality of open-ended cells of equilateral triangular cross section, that the inner surfaces of each said equilateral triangular cell comprise a pair of light reflective mirror surfaces and a light absorbent surface, that the transverse elements extend substantially at right angles

to the longitudinal elements to form a plurality of open ended cells of square or rectangular cross section, or that the inner surfaces of each said square or rectangular cell comprise a pair of adjacent light absorbent surfaces and a pair of adjacent light reflective surfaces.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the shape of the lamellae of figure 27 of Raimondi to include a plurality of transverse elements intersecting the longitudinal elements such that the transverse elements extend relative to the longitudinal elements to form a plurality of open-ended cells of equilateral triangular cross section or extend substantially at right angles to the longitudinal elements to form a plurality of open ended cells of square or rectangular cross section, since it has been held that a mere change in shape of an element is generally recognized as being within the level of ordinary skill in the art when the change in shape is not significant to the function of the combination.

Therefore, one would have been motivated to select the shape of an equilateral triangle, square or rectangle, for the purpose of effectively directing light in a desired direction (see at least column 8, lines 23-56 of Raimondi). *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the inner surfaces of each said equilateral triangular cell comprise a pair of light reflective mirror surfaces and a light absorbent surface and have the inner surfaces of each said square or rectangular cell comprise a

pair of adjacent light absorbent surfaces and a pair of adjacent light reflective surfaces, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the inner surfaces of each said equilateral triangular cell comprise a pair of light reflective mirror surfaces and a light absorbent surface and have the inner surfaces of each said square or rectangular cell comprise a pair of adjacent light absorbent surfaces and a pair of adjacent light reflective surfaces, for the purpose of effectively producing a desired light yield in a particular direction (see at least column 8, lines 23-56 of Raimondi) (*In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235).

Other Related Art

44. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Caferror, U.S. Patent Number 5,008,791; Lewin et al., U.S. Patent Number 5,149,191; and Shimizu et al., U.S. Patent Number 4,506,953.

Conclusion

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S. C./
Examiner, Art Unit 2872
9/22/2009

/Stephone B. Allen/
Supervisory Patent Examiner
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